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ABSTRACT

A study investigated the actual and ideal size of English second language classes in areas of Africa, and the problems associated with teaching large classes. Data were obtained from teachers from South Africa and Botswana attending a course at Leeds University (England). The two questionnaires used gathered information on (1) class size, perception of ideal class size, and the importance attached to class size in the teaching situation; and (2) ways in which large classes stop teachers from doing what they would like to, teachers' perceptions of an ideal class, methods used in a large class, and teachers' general opinions about why teaching in large classes is a problem to be studied. Results suggest that teachers do find large classes problematic for reasons other than student numbers. Actual class size and perceptions of ideal class size varied considerably. All respondents felt they were teaching classes that were too large. While teachers' responses were powerfully influenced by their own experience, the inconsistency of ideal or difficult class sizes suggests some hypothesizing on their part. Despite this finding, this population's responses were consistent with those of teachers in other parts of the world. (MSE)

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LANCASTER - LEEDS

LANGUAGE LEARNING IN LARGE CLASSES

RESEARCH PROJECT

LANGUAGE LEARNING IN LARGE CLASSES : A PILOT STUDY OF SOUTH AFRICAN DATA

LINDA PEACHEY

PROJECT REPORT NO. 8

Linda Peachey
Language Learning in Large Classes : A Pilot Study of South African Data

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1 Introduction [1]

Although language teaching in large classes is a common phenomenon in many countries there is little available data on the topic. This is despite the fact that many teachers working with large classes claim that this is a major problem for them. In the black primary school system in South Africa, no formal limit is placed on class size, and in fact the government allocates funding to schools according to the number of pupils accommodated. There is thus a powerful incentive for school administrators to increase the size of their classes. In addition, there is a shortage of trained teachers, particularly for English. It will not be surprising to discover, therefore, that large classes are a conspicuous phenomenon in South African primary schools.

The aim of this study is twofold : first, to assess the size of classes in which these teachers usually teach, as well as to gain insight into their perceptions of how big ideal, small or large classes are; second, if (as many teachers say) teaching English in large classes is a problem for them, to try to find out in which ways it is a problem and how it stops teachers from doing what they would like to do within their classes. The present study focuses on data which has been obtained from visiting teachers from all over South Africa and from Botswana who were attending a short course at Leeds University.

This project was undertaken in conjunction with the Lancaster-Leeds Language Learning in Large Classes Research Group and contributes to a study which is investigating the problems of learning English as a foreign or second language in large classes. Data has so far been collected from countries as diverse as Indonesia, India, Japan, Mexico, and several African countries, including Nigeria and South Africa.

In Section 2 of the paper, I describe very briefly the two data collection instruments which were used. In Section 3, the results of the first of these, a questionnare dealing with class size, are presented and discussed in detail. Section 4 presents the results of the second research instrument, a questionnaire dealing with the difficulties of working in large classes, and discusses the results in detail. Section 5 brings the paper to an end with a summary of methodological issues and findings which emerge from the data. The questionnaires, statistical tables and other material are gathered in four appendices.

2 Data Collection

Two different questionnaires, designed by the Research Group, were used. These were administered in Leeds in December 1987 to fifteen teachers who had volunteered to complete them. Fourteen of the teachers were non-native speaker teachers working in the black primary school system in South Africa. The fifteenth

respondent was a native speaker of English who worked in a teacher training college.

The first questionnaire - the 'Numbers Questionnaire' (see Appendix A) - investigates three main areas. The first of these is the size of classes which teachers come into contact with. The second is their perception of an 'ideal' class, a large class and a small class. The third area is the importance which they attach to the problem of class size in their specific teaching situation.

The second questionnaire - the 'Difficulties Questionnaire' (Appendix C) - investigates four areas. The first is the ways in which large classes stop teachers from doing what they would like to do. The second is teachers' perceptions of what they could do in an 'ideal' class. The third area of investigation is the ways in which respondents help their students to learn English when teaching in a large class. Finally, teachers' general opinions about why they consider teaching and learning in large classes to be a problem are studied.

3 Responses To The 'Numbers Questionnaire'

This discussion of responses to the 'Numbers Questionnaire' falls into five subsections. I begin by discussing technical questions concerning analysis of the responses. Section 3.2 presents the

findings of the questionnaire. In Section 3.3 I look very briefly at the problem of defining the 'large class'. Section 3.4 then discusses relationships between teachers' experience and perceptions of class size, and Section 3.5 considers the strength of those relationships.

3.1 Methodology

There are a few general remarks which I would like to make concerning the 'Numbers Questionnaire' and its analysis.

It has already been noted that one of the respondents differed from the others in several respects, most notably in that she was a college lecturer and a native speaker of English. It was decided to include her responses in the data base as these were not markedly different from the answers given by the primary school teachers; in fact they were identical to some of the other replies.

There were 15 respondents. However, several respondents provided responses which in one way or another were inconsistent or incomplete. It became apparent that 60% of the respondents had either misunderstood or failed to complete parts of the questionnaire and their responses were therefore not valid for statistical analysis. (Questions 5a and 5b, which asked respondents to indicate at which point classes become

uncomfortably small or impossibly small, seemed particularly prone to misinterpretation. In Project Report No. 4 (1989), Coleman has found a similar problem with other data.) The inconsistent or incomplete responses were separated out, according to the conditions set out by Coleman (Project Report No. 4, 1989). This left just six 'valid' sets of responses. Of these six, five (83%) were primary teachers and one (17%) was the college lecturer.

The question of whether or not to ignore 'invalid', inconsistent or even incomplete responses is a difficult one. On the one hand, working with a completely consistent set of responses allows one to make comparisons between the responses to individual questions, as in Table 4 (Appendix B). On the other hand, by ruthlessly pruning the data in this way, one is unavoidably failing to make use of some responses which may nevertheless be of partial value. The problem, of course, is to know ***which*** parts of an inconsistent response accurately reflect the respondent's perceptions and which do not.

As will be observed in Section 3.2 below, responses to one of the questions revealed that 60% of respondents thought that large classes constituted their major problem, but 40% felt that this was only their second major problem. As the questionnaire stands at the moment, there is no way of finding out what matters are considered by respondents to be even more problematic than large classes. I would therefore suggest that the questionnaire

be revised so as to give respondents the opportunity to reveal what problems, if any, they find more troublesome than class size.

3.2 Findings of the 'Numbers Questionnaire'

Tables 1 - 5, which present summaries of an initial analysis of responses to the 'Numbers Questionnaire', can be found in Appendix B.

Nine of the total population (60%) considered that large classes were their major problem; the remainder considered them to be one of their major problems. Among the six who gave completely valid sets of responses, exactly half believed large classes to be their main problem, and half found them to be one of the major problems which they have to face.

The mean, range and median of the responses given by all fifteen respondents are given in Table 1. The six valid sets of responses are summarised in Table 2. The data from the six completely consistent sets of responses are used in Table 3 to show the relationships between respondents' experiences of class size and their perceptions.

Respondents' answers to the eight different questions were correlated with each other. Pearson correlation coefficients (r)

were calculated to establish the size of the relationships between responses. This was done only with the six completely valid sets of responses. (See Table 4, Appendix B.)

Finally, it was found that eleven respondents (73%) said that they would be willing to help with future research and three (20%) said they would not be willing; one respondent (7%) abstained. No reasons were asked for, or were volunteered, for the unwillingness to help with future research.

3.3 How large is a large class?

If one looks at Table 2, the summary of consistent responses, one can see that the 'usual' class size encountered by individual respondents ranges from 35-85. The gross average is 50.8.

The 'largest' class size experienced by respondents ranges from 37-85. The group average for the 'largest' class size is 52.0. These data provide us with evidence of how 'large' language classes are amongst the respondents; they differ markedly from some of the other sets of data presented by Coleman in the first analysis of responses to the numbers questionnaire (Project Report No. 4, 1989). There are clearly great variations in respondents' experiences of class size and it would appear, confirming Coleman's argument, that it is difficult to define 'large' in terms of a single number.

3.4 Relationships between experience and perception

From Table 3 it can be seen that the average largest class size normally taught by the respondents with valid responses is 52.0. This is slightly below the mean figure of 54.7 which respondents give as the point at which classes become intolerably large, and it is very much larger than the figure of 44.2 which is the average of perceptions of the point at which problems begin because classes are large. The average size of class which all respondents normally teach is 50.8, which is well above the point (44.2) at which problems begin.

In other words, the average largest class which respondents teach is smaller than the size which the same respondents consider to be intolerably large, but very much bigger than the point at which they begin to experience problems. Also, the average usual class which these respondents teach is much larger than the point at which they begin to experience problems. The respondents are accustomed to (or are always) teaching in classes which are large enough for problems to begin. They sometimes teach in classes which are intolerably large, but this is not the normal state of affairs. The pattern revealed here confirms the findings of Coleman's analysis of data from secondary and tertiary institutions in different parts of the world (Project Report No. 4, 1989).

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The average smallest class which the teachers teach has 43.2 members, just below the point at which problems begin. The average ideal class has 34.0 members. The average size of classes which are so small that teachers begin to experience problems in them is 5.7, and the average size of classes which are intolerably small is 3.7. That is to say, respondents are teaching classes which are considerably larger than their ideal class size; and the class size which these teachers believe to be ideal is smaller even than the size of the smallest class which these teachers normally experience. Again, this matches perfectly with the findings of Coleman's earlier analysis.

To summarise, we have seen that respondents are teaching classes which are very much larger than the size which they consider to be ideal, and larger than the point at which they believe problems begin. Thus, large classes, as defined by the teachers themselves, are well within their experience. On the other hand, small classes, as defined by teachers, appear to be well outside their experience. This allows us to reject one of the hypotheses considered by Coleman in the earlier analysis (Project Report No. 4, 1989), that respondents would be reluctant to admit that they were teaching classes in which they experienced problems.

Finally, there seems to be some evidence here to support the trend noticed by Coleman that when the largest class regularly taught has more than forty participants, teachers claim that even

their usual classes are bigger than the point at which problems begin. More work is needed to investigate this relationship.

3.5 Strength of relationships between experience and perception

It was decided to test the possibility that perceptions of ideal class size, problematic class size and uncomfortably large or small class size are related to the size of classes which teachers have actually experienced. This was done by calculating Pearson's product moment correlation coefficient (r). These are given in Table 4. If the value of r exceeds the critical values given then there is a statistically significant relationship between the two variables which are being compared. (Of course, high correlations give no indications as to cause or effect. One needs information about other variables and the possible contribution each might make in order to be able to interpret results qualitatively. Furthermore, the size of the sample is rather small (N = 6), and so we have to be wary of attaching too much significance to the results.)

Table 4 gives the results of 28 correlations, some of which are positive and very high, some of which are negative and very low. Some elements of the table are not surprising. For example, it is only to be expected that responses concerning teachers' experience (Questions 1a, 1b and 2) correlate highly with each other. This means little more than that the largest

classes which teachers teach are consistently larger than the smallest classes and the usual classes which they teach. Similarly, it is only to be expected that responses concerning perceptions also correlate fairly strongly with other perceptions (Questions 3, 4a, 4b, 5a and 5b). This means merely that teachers' ideal class size is smaller than the point at which they believe problems to begin, and in turn that this point is smaller than that at which classes become intolerable. Since this table makes use only of the completely consistent sets of responses, this is only to be expected.

However, there is something about the table which is immediately striking. That is, responses to Questions 5a and 5b do not correlate significantly with ***any other*** responses (except with each other). In other words, there is only a negative and very small correlation between, on the one hand, respondents' experience of class size and, on the other hand, their perceptions of small class size. Similarly, there is a negative and very small relationship between respondents' perceptions regarding small class size and, on the other hand, their perceptions regarding ideal and large class size. The most reasonable interpretation of this pattern - or, rather, absence of pattern - would appear to be that respondents simply do not have experience of small classes on which to base their responses. As Coleman suggests (Project Report No. 4, 1989), the implication is that actual experience is not an important influence on the answers which teachers give to questions

concerning small class size. That is to say, their responses regarding small classes are purely hypothetical - guesswork - and are not related to experience.

There is one more aspect of Table 4 - indeed the most important one - which remains to be considered. This relates to correlations between, on the one hand, all responses concerning experience, and, on the other hand, all responses concerning perceptions of class size. There are fifteen such relationships and they are highlighted in bold print in Table 4. The same fifteen correlations have been extracted from Table 4 to form Table 5.

We have already observed that there is no relationship of any statistical significance between respondents' perceptions concerning small classes and their actual experience. This, then, leaves nine correlations which require our attention. It will be seen from Table 5 that all nine of these correlations are significant at the 5% level and that seven of them are also significant at the 1% level. Indeed some of them are very strong indeed. Another feature to be observed is that the first three figures in Column 1 (largest experienced class) are larger than those in columns 2 and 3, and that those in Column 3 (usual experienced class size) are larger than those in Column 2.

What sense are we to make of this? The conclusion appears to be that it is the size of the ***largest*** class which one has

experienced which has the most powerful influence on the way in which one perceives ideal and large (but not small) class size. Usual and smallest experienced class sizes also appear to have an important influence on perceptions, though less powerfully than the size of one's largest class.

This analysis is more detailed than that performed by Coleman in his earlier report. On the other hand, the present analysis makes use of only 6 sets of responses, whilst Coleman had access to 149 sets of consistent data. Nevertheless, the pattern emerging from Table 5 perfectly coincides with that which Coleman identified (Project Report No. 4, 1989).

We can conclude by saying that the larger a teacher's ***largest*** regularly taught class is, the larger a class has to be for it to be considered ideal, problematic or intolerable. As Coleman says, teachers therefore become more tolerant of large classes the larger their own classes become.

4 Responses To The 'Difficulties Questionnaire'

My aim in this section is to raise a few tentative pointers and questions concerning the 'Difficulties Questionnaire' (Appendix C) and its analysis. There are three sub-sections. In the first of these, I look in detail at the questionnaire and identify difficulties with the research instrument itself and problems in

the interpretation of results. Section 4.2 pays detailed attention to the categorisation of responses and compares the findings with those achieved by other members of the Lancaster-Leeds Language Learning in Large Classes Research Group. Finally, Section 4.3 identifies three major points of interest which seem to emerge from the analysis of the questionnaire.

4.1 Methodology

The purpose of this section is to discuss the advantages of the questionnaire as a research instrument, and also to point out some problems which have become apparent, both with the questionnaire itself and with the process of interpreting responses.

The first question asks respondents to complete the statement, 'Large classes make it difficult for me to do what I would like to do because ...'. Question 2 asks them to complete the statement, 'With an ideal number of students in my class, I could ...'. Both of these questions gave rise to an abundance of rich information. Question 3 asks respondents to complete the statement, 'When I am teaching a large class, I help my students to learn English by ...'. This question did not succeed in eliciting such fruitful responses as Questions 1 and 2. The answers tended to centre around 'class activities' and 'evaluation', both of which seem to be the obvious answers one

could give to such a question. The last question simply asks, 'Do you have any other comments or questions about teaching and learning in large classes?' The answers to this question tended to be repetitions of responses given to Questions 1 and 2. Nevertheless, Question 4 was of some value as some of the responses enabled new categories of concern to be created (see Appendix D, categories 6 and 7).

There is apparently a fundamental assumption underlying the questionnaire that large classes are to be viewed negatively, and, by implication, that small classes are more desirable than large ones. One brave respondent actually suggested :

Some good products have emerged from large classes.

I wonder whether it would be possible to make the questionnaire more neutral, perhaps by balancing each negative question with a positive one (for example, by asking them in what ways large classes make it ***easy*** for them to do certain things).

Question 1 gave rise to some ambiguities as the respondents were not asked to specify ***why*** the points which they mentioned made it difficult for them to teach in large classes. For example, it was only by piecing together several responses that I was able to work out that a 'rigid timetable' (mentioned by a third of all respondents) causes problems because teachers must work according to a National Syllabus which specifies the work to be done in order to pass a 'promotion' examination which is taken at the end of the year; large classes mean that it is difficult

for all students to attain the level needed to pass the examination. My concern here is that too much is left to the researcher's own interpretation. I would like to suggest that Question 1 be altered in such a way that responses will be more complete and less ambiguous.

Also, because respondents were not communicating in their first language, it was actually quite difficult to fully understand what they were trying to say in some places. An example is, 'I gave them more advanced work so they can think clearly.' By the same token, if respondents had language problems providing answers to the questions, one has to ask whether they also had some difficulty interpreting the questions.

There is another very important matter relating to the context in which these questionnaires were administered. These respondents had just completed a short course at the University of Leeds, during which there had been an emphasis on a child-centred approach to education. One wonders how much this influenced the answers which the respondents gave, and whether they would have replied in the same way before attending the course. This doubt particularly applies to responses which fall into the category of 'Teaching and Learning' (see below). The following extracts from the questionnaires serve to illustrate the point I am making :

> I couldn't answer No. 1 easily since studying child-centred education as I was always more teacher-centred before.

> We would like to be given a chance of teaching small classes to implement our new skills.
>
> If I want to achieve my system of child-centredness how can I go about it in large class of 80 pupils?

One is forced to ask oneself whether repondents in some way felt that they were being assessed at the end of the course - even though they did not have to identify themselves - and so felt obliged to provide responses which reflected their newly acquired knowledge and skills. (2)

The final problem concerning the questionnaire which needs attention relates to the subjects which teachers actually teach. Two respondents said that teaching large classes was difficult when they were 'observing experiments' and teaching 'science lessons'. Clearly, we have a problem when respondents work in situations where English is taught across the curriculum. I suggest that the questionnaire needs modification so that it becomes clearer that respondents are being asked not about their experience of teaching in English, but, rather, about their experience of teaching the subject of English.

4.2 Categorisation of responses

The responses of all fifteen respondents were taken into consideration. It was found that responses tended to fall into seven broad categories, and that these categories could in some cases be subdivided. I have left this classification as loose as

possible for fear of losing valuable information. The category system is as follows :

1 Teaching and Learning
- individual attention
- teaching style
- learners' needs
- pace
- range of activities
- achievement of goals

2 Evaluation
- monitoring in class
- marking

3 Teaching Materials

4 Classroom Management
- space
- groups
- displaying work
- discipline
- movement

5 Time

6 Affective Problems

7 Educational Planning

It was found that responses to Questions 1, 2 and 3 could all be accommodated in the same categories. Thus, in the summary of responses in Appendix D, each category or sub-category is illustrated with examples from responses to the four questions from the questionnaire : 'Difficulties', 'Ideal' and 'Current Practice'. The percentage of respondents who made responses falling into each of the sub-categories is also given. Not surprisingly, responses to Question 4 did not always fit neatly into the same categories. In some cases, then, the responses to Question 4 required the formation of new categories.

Although identifying broad categories in which to classify responses was not too difficult, some problems did arise. An example is the question of 'noise', mentioned by just one respondent. Eventually, I decided to group it under class management. McLeod (Project Report No. 7, 1989) also mentions 'noise' as being difficult to categorise satisfactorily.

The categories which I have decided to employ resemble those suggested by Jacob Sabandar in his analysis of Indonesian data (Project Report No. 9, 1989) : 'Classroom Management', 'Teaching and Learning', 'Evaluation', 'Time Allocation' and 'Teaching Aids'. Also, my categories are not dissimilar to those proposed by Virginia LoCastro in her analysis of Japanese data (Project Report No. 5, 1989) : 'Pedagogical', 'Management', and 'Affective'.

My proposed categories tend not to resemble the three categories suggested by Nicki McLeod in her analysis of data from Japan, Nigeria and various African countries (Project Report No. 7, 1989) : 'Affect', 'Effort' and 'Effect'. On the other hand, the 'affective' category proposed by both McLeod and LoCastro also appears as a major category in this analysis.

Despite similarities in the category system, there appear to be important differences between this data and that discussed by Sabandar. He identified classroom management as the main problem (57% of all reported difficulties), followed by teaching and

learning (14%), evaluation of student's progress (14%), time allocation (11%), and teaching aids (3%). The data analysed in this study would seem to suggest that teaching and learning (mentioned by 80% of all respondents) and teaching materials (80%) create major problems for South African primary teachers working in large classes. These are followed by affective problems (55%), problems of evaluation of student's progress (47%), classroom management (47%); time allocation (40%), and educational planning (20%).

It is difficult to draw comparisons between different sets of data as it is not known exactly how the other researchers formulated their categories and what they included in them. However, as respondents were not asked to identify the ***main*** problem encountered in their large classes, but were simply asked to list as many points as possible, it is premature to try to identify ***main*** and ***subsidiary*** difficulties, and to try to rank these or to give them relative weights. For this reason, in Appendix D I have simply indicated the percentage of respondents who identified a particular difficulty.

4.3 Findings

Can we see any patterns emerging from the data? At this stage it is premature to form any firm opinions, or offer anything but tentative suggestions. However, there do seem to be certain

patterns emerging and in this section I will concentrate on three points of interest.

The first of these has already become apparent from the previous section, in which it was shown that the responses to Question 2 (what could be done in an ideal class) fit perfectly into the classification scheme devised for responses to Question 1 (what can be done only with difficulty in a large class). Similarly, we have seen that there is little difficulty in classifying responses to Question 3 (what is currently done when teaching large classes) using the same category system. What this suggests is that in many cases, when teachers make complaints about the difficulty of teaching in large classes, their complaints are based on actual experience of having tried to do the things which they report as being difficult to do.

The second point to emerge from the responses concerns the environment of the large class. Evidence from social psychology suggests that an individual's behaviour is greatly determined by the environment, as it influences what is perceived, what can be done and how one behaves (Altman 1975, Baum and Valins 1977). The environment consists of the physical setting in which behaviour takes place and of the individuals who are present in the situation. Deletes and Jackson (1972) and Gump (1974) suggest that pupils and teachers interact according to the available layout and decor of the classroom. Thus, an analysis of classroom interaction would need to take into account the

characteristics of the environment and the way it influences pupils' and teachers' behaviour. The 'Classroom Management' category of responses to the questionnaire (see Appendix D) indicates that teachers are well aware of the importance of the classroom environment for their learners : they complain of lack of space, difficulties in movment, difficulties in organising groups, discipline problems, and even a problem of harrassment.

The third matter for discussion concerns the effectiveness of teaching in large classes. Several of the responses imply that teachers see a relationship between class size and learning. For example, one respondent said :

> He (the teacher) is likely to have a failure every year; that gives him a bad name.

Unfortunately, research findings do not support the opinions of the teachers involved in this survey. Marklund (1962, abstracted in Yates 1966) found that in Sweden pupils in small classes do not show marked superiority in attainment when compared to those in large classes. Furthermore, it has been suggested that higher standards of reading tend to be associated with many factors, including large classes (Maxwell 1977). Findings like this present a recurrent puzzle to teachers.

One explanation for this apparent anomaly has been offered by Beard (1987). He suggests that larger classes are often associated with other ***favourable*** factors. This is because a school which is perceived as being well-endowed or which has a

good reputation will become more popular and attract more pupils. Beard, however, is discussing the British educational context and it is not clear whether this explanation can be applied elsewhere.

A final point to be made regarding the relationship between teaching effectiveness and class size is that the work which has been done so far tends to ignore the effects which teaching large classes has upon teachers. We know that the attitude and feelings of the teacher may have a considerable effect on the learning process (Barker-Lunn 1970).

In this discussion of findings I have suggested that three major points emerge. The first of these is that the reports of problems which teachers experience in large classes is apparently based on actual experience of having tried to do the things which they say are difficult to do. The second major point is that teachers appear to be aware that the classroom environment has an important influence on learning and that large classes contribute to a deterioration in the environment. The last point is that teachers see a correlation between class size and teaching effectiveness; other research does not support them, but it may be that the other research has not paid sufficient attention to affective factors.

I would like to end by suggesting that it is probably not appropriate to make generalisations about all large classes in

all parts of the world. The particular background from which groups of respondents come, the educational system in which they find themselves, and of course their individual personalities make generalisation impossible. In the data which has been considered here, references to 'harassment' of teachers and problems with a 'rigid timetable' caused by the National Syllabus, for example, are clearly local phenomena which would be unlikely to occur in responses from other parts of the world. What we need, therefore, are more case studies, such as this one, which eventually will enable us to see the extent to which teachers working in large classes in different parts of the world perceive the problem of large classes in similar or in different ways.

5 Conclusions

In my concluding remarks, I would like to pay some attention to methodological questions arising from the use of the two questionnaires. In Sections 3.1 and 4.1 I have discussed in detail certain very specific problems connected with the two questionnaires, but I now wish to consider some more general questions. Finally, I will summarise very briefly the most important findings of the study.

5.1 Methodological problems

What are the limitations posed by questionnaires as a means of conducting educational research and what conclusions can be drawn from the data gathered by such means? The answers to these questions depend upon the validity of the instrument and the extent to which a questionnaire actually measures what it sets out to measure.

When using questionnaires we are trying to get at reality via the respondent's cognition and trying to tap his/her cognitive resources. But underlying this are two basic assumptions : i) that people are willing to expose themselves, and ii) that they have the capacity to do so. We must ask ourselves whether the questionnaire really gives respondents a chance to express their opinions and attitudes or whether it constrains them in some way. That is, does the questionnaire make prior assumptions, either overtly or implicitly?

Is it naive to think that one can get at the truth through questionnaires? Can such a simple technique adequately reveal the range of backgrounds from which respondents come and the range of attitudes and motivations which they hold? Can we be sure that the designers of the questionnaire and the respondents share the same interpretations of key terms and concepts? When questionnaires are used to investigate attitudes and perceptions, this last question becomes even more crucial. Can we assume that

what people say they do and what they actually do are one and the same thing? This is an important question when our purpose is to investigate how teachers behave in large classes.

Reliability implies consistency, which in turn implies stability on the part of respondents. Do people reply differently in different contexts? A basic assumption of questionnaires is that people are consistent in the way that they think and that they are able and willing to verbalise this consistency. And then what about inter-rater reliability? How reliably can researchers categorise their interpretations of responses?

How far is it ever possible to identify one variable such as size within an interactive classroom environment when there are so many other variables? How far can small groups of respondents be taken to be representative of the countries or types of institutions in which they are working? How far, in other words, can we generalise from the results?

I am not attempting to formulate answers to these questions. I am simply trying to pull together some of the methodological worries that I have. Some of these worries have arisen from my own work; others have come up in discussions with other members of the Lancaster-Leeds Language Learning in Large Classes Research Group.

5.2 Summary of findings

Despite the problems which are clearly associated with the questionnaires, and even though the Research Project is still at an early stage, I feel that it is providing an abundance of information which in turn is exposing patterns which we cannot ignore.

The tentative conclusions which I would like to draw are similar to those reached by Coleman (Project Report No. 4, 1989). Teachers do find large classes problematic, and this is more than simply a matter of the numbers involved. There appears to be considerable variation in the size of the classes which respondents have actually experienced, and also in their perceptions of the size of the ideal class and the point at which classes become large. All respondents believe that they are regularly teaching classes which have more than the ideal number of learners; in other words, respondents are accustomed to teaching classes which in their own terms are too big.

The most powerful relationships between experience and perception appear to be those between the size of the largest class which respondents regularly teach and their estimations of the points at which classes are ideal, become difficult or become impossible to teach because they are too large. The usual class size to which respondents are accustomed also has an influence, but this is weaker than the size of the largest class which they

teach. The respondents do not appear to teach classes in which there is an ideal number of learners. This suggests that there must be an element of hypothesising in the answers which respondents give about ideal class size, even though these answers are powerfully influenced by their practical experiences. Teachers' perceptions of small classes are also hypotheses, but these are not, it would seem, influenced by their experiences.

The phenomenon of large classes exists and is a complex animal. The problems of the categorisation of teachers' attitudes to large classes are considerable, and so far we do not have a satisfactory way of analysing them. Nevertheless, there do appear to be some similarities between the attitudes of teachers in different parts of the world. An important area for further work is to establish more clearly the extent to which teachers' attitudes to large classes are specific to a particular country or situation.

Notes

1 This is a heavily revised version of a paper which was originally prepared as a Negotiated Study for the M.Ed. degree of the University of Leeds. It has been an enormous pleasure and privilege to have been involved in this project. I apologise for any errors and for anything which has been overlooked.

2 Incidentally, these comments give rise to a new question. To what extent do training courses of the type which these repondents had been attending actually enable participants to cope with real problems when they return home? Is there a danger - as these quotations perhaps indicate - that overseas training may even be estranging teachers from their teaching situations? Similar questions have been raised by both Coleman (Project Report No. 2, 1989), and Allwright (Project Report No. 3, 1989).

References

Altman, I. 1975. ***The Environment and Social Behaviour : Privacy, Personal Space, Territory, Crowding.*** Monterey : Brooks/Cole.

Barker-Lunn, J.C. 1970. ***Streaming in the Primary School.*** Slough : N.F.E.R.

Baum, A. and S. Valins. 1977. ***Architecture and Social Behaviour : Psychological Studies of Social Density.*** Hillsdale, N.J. : Erlbaum.

Beard, R. 1987. ***Developing Reading : 3-13.*** London : Hodder and Stoughton.

Deletes, P. and B. Jackson. 1972. Teacher-pupil interaction as a function of location in the classroom. ***Psychology in the Schools***, 9 (2), 119-123.

Gump, P. 1974. Operating environments in schools of open and traditional design. ***School Review***, 82, 575-593.

Marklund, S. 1962. ***Skolklassens Storlek och Struktur.*** Stockholm : Almqvist & Wiksell.

Maxwell, J. 1977. ***Reading Progress from 8 to 15.*** Windsor : N.F.E.R.

Yates, A. 1966. ***Grouping in Education : A Report Sponsored by the UNESCO Institute for Education, Hamburg.*** New York : John Wiley.

Appendix A : Numbers Questionnaire

Important : please think only of ***English Language*** classes.

1 How many people are there :
   a) in the largest class which you regularly teach?
   b) in the smallest class which you regularly teach?

2 What is your usual class size?

3 What is your ideal class size?

4 What class size do you consider to be uncomfortably large?
   a) At what number do the problems begin?
   b) At what number do the problems become intolerable?

5 What class size do you consider to be uncomfortably small?
   a) At what number do the problems begin?
   b) At what number do the problems become intolerable?

6 Among all your problems, how important is class size? Is dealing with large classes (please ring the appropriate letter) :

the major problem	a
one of the major problems	b
a problem, but not a major one	c
a very minor problem	d
no problem at all	e

7 Is the institution you teach in (please ring the appropriate letter) :

primary/elementary?	a
secondary?	b
college/university?	c
other (please specify)?	d

Appendix B : Analysis of Numbers Questionnaire

Table 1 *Summary of Responses to 'Numbers Questionnaire', from All Respondents*
N = 15

Question	Mean	Median	Range
1a	56.8	45.0	37 - 90
1b	44.0	38.0	30 - 80
2	48.5	45.0	35 - 85
3	29.5	30.0	20 - 50
4a	43.9	45.0	35 - 60
4b	53.6	45.0	25 - 100
5a	17.5	15.0	1 - 45
5b	15.2	10.0	0 - 45

Table 2 *Summary of Consistent Responses to 'Numbers Questionnaire'*
N = 6

Question	Mean	Median	Range
1a	52.0	47.5	37 - 85
1b	43.2	37.5	32 - 80
2	50.8	45.0	35 - 85
3	34.0	32.5	24 - 50
4a	44.2	42.5	35 - 60
4b	54.7	50.0	40 - 85
5a	5.7	3.5	1 - 15
5b	3.7	1.0	0 - 10

1a = largest class regularly taught
1b = smallest class regularly taught
2 = usual class size
3 = ideal class size
4a = number at which problems begin, because too large
4b = number at which class becomes intolerably large
5a = number at which problems begin, because too small
5b = number at which class becomes intolerably small
N = number of correspondents

Table 3 *Relationships between Experienced Class Size and Perceptions of Class Size, from Consistent Responses Only*
N = 6

Experience	Mean	Perception
	54.7	large, intolerable
largest	52.0	
usual	50.8	
	44.2	large, problems begin
smallest	43.2	
	34.0	ideal
	5.7	small, problems begin
	3.7	small, intolerable

Table 4 *Correlations between Responses (Consistent Responses Only)*
N = 6

	Question							
	1a	1b	2	3	4a	4b	5a	5b
1a								
1b	.971							
2	.993	.962						
3	.981	.919	.967					
4a	.850	.764	.809	.911				
4b	.949	.900	.915	.956	.946			
5a	-.289	-.435	-.308	-.210	-.202	-.205		
5b	-.225	-.349	-.273	-.128	-.082	-.103	.954	

Critical values of Pearson's *r* for N-2 = 4 :
5% significance level = 0.669; 1% significance level = 0.833

Table 5 *Correlations between Perceived and Experienced Class Sizes (Consistent Responses Only; Extract from Table 4)*
N = 6

Perception	Experience largest	smallest	usual
ideal	.981	.919	.967
large, problems begin	.850	.764	.809
large, intolerable	.949	.900	.915
small, problems begin	-.289	-.435	-.308
small, intolerable	-.225	-.349	-.273

Critical values of Pearson's *r* for N-2 = 4 :
5% significance level = 0.669; 1% significance level = 0.833

Appendix C : Difficulties Questionnaire

Many teachers say that teaching English in large classes is a problem for them. But in what way are large classes a problem? How do large classes stop teachers from doing what they would like to do? Your responses to this questionnaire will help us to answer these questions.

Under each of the following, please list as many points as you can.

1 **Large classes** make it difficult for me to do what I would like to do because :

2 With an **ideal** number of students in my class, I could :

3 When I am teaching a **large class**, I help my students to learn English by :

4 Do you have any other comments or questions about teaching and learning in **large classes**?

5 Is the institution you teach in (please ring the appropriate letter) :

primary/elementary? a
secondary? b
college/university? c
other (please specify)? d

6 In principle, would you be willing to help us with future research into large classes (perhaps by responding to another questionnaire)? **YES/NO**

Thank you very much for your help.

Appendix D : Analysis of Difficulties Questionnaire

1 Teaching and Learning

1.1 Individual attention

Difficulties : I cannot give the pupils individual attention. (80%)
Ideal : I could give them individual attention and monitor their progress. (66%)

1.2 Teaching style

Difficulties : Large classes force me to use a teacher-centred method/class teaching. (47%)
Ideal : I could use child-centred methods (see how they tackle problems, ask questions, guide them, make them more independent learners). (40%)
Current Practice : Lecturing or giving notes, or involving them in work I am doing (teacher-centred method). (35%)

1.3 Learners' needs

Difficulties : I cannot meet the students' needs and identify their problems as they arise, and many children 'drop out'. (53%)
Ideal : I could get to know their individual needs (i.e. gifted, average, slow learners). (60%)

1.4 Pace

Difficulties : I can't work at the pace of each child and do remedial work. (60%)
Ideal : I could work at the pace of each child and/or do remedial work. (27%)

1.5 Range of activities

Difficulties : There is not enough time for different activities such as oral work and writing. (13%)
Ideal : I would be able to do more individual oral work and reading and project work (maybe including parents). (33%)
Current Practice : Oral work and singing in unison (47%); reading individually or in unison (40%); setting out written work (26%); dramatizing stories (20%); listening activities (7%); letting them memorize texts (7%); teaching English every day (7%); substitution tables (7%).

1.6 Achievement of goals

Difficulties : ... to achieve my goals and evaluate myself as teacher. (20%)

Ideal : I could achieve my goals and evaluate my own teaching. (13%)

2 Evaluation

2.1 Monitoring in class

Difficulties : ... to evaluate pupils' work and monitor their progress accurately. (47%)

Ideal : It would be easier to evaluate their work and see that they do it. (33%)

Current Practice : Letting them recite in groups, or evaluating them orally and picking up remedial work from here. (20%)

2.2 Marking

Difficulties : ... to finish all my marking as it is time consuming. (40%)

Ideal : I would be able to correct their work on time. (27%)

Current Practice : Giving them simple questions to be marked easily (13%); only marking some of the work (13%); letting them mark each other's work (7%).

3 Teaching Materials

Difficulties : to prepare enough materials, work cards etc. and there are not enough books to go round. (80%)

Ideal : I would have enough time to prepare material for each student. (47%)

Current Practice : By using teaching aids, pictures, posters, flashcards (possibly as a stimulus for oral work 7%). (47%)

4 Classroom Management

4.1 Space

Difficulties : ... a problem with classroom organisation due to a lack of space for tables. (40%)

Ideal : There would be more space and it could be organised in a way more conducive to learning. (27%)

4.2 Groups

Difficulties : ... to organise group teaching as it creates too many groups and there is a lack of space. (47%)

Ideal : It would be easier to organize group work. (40%)

Current Practice : By holding class discussions/debates. (47%)

4.3 Displaying work

Difficulties : ... to display all the children's work on the walls as there is too much of it. (27%)

Ideal : I would be able to display each child's work every day. (20%)

4.4 Discipline

Difficulties : Large classes create discipline problems, I can't control the class (33%); harassment may take place (13%).

Ideal : Class discipline and control would be better. (33%)

4.5 Movement

Difficulties : Difficult for the children and teacher to move about freely. (27%)

Ideal : Freedom of movement would be easier. (20%)

5 Time Allocation

Difficulties : In large classes a rigid (fixed) timetable is a problem (exams at the end for promotion and children may fail to reach the desired standard) (33%); there is no time to work on resources. (40%)

6 Affective Problems

Difficulties : Many students get discouraged/fail/leave school/are not involved/lack motivation/are inactive/lazy (55%); the teacher may become discouraged/a bag of nerves (33%); large classes make it difficult to get to know each student as a unique person, and their names and backgrounds (47%).

Ideal : I could get to know the children better and develop a better 'qualitative' teacher/pupil relationship. (47%)

Other Comments : Teachers in large classes must have the qualities of being caring and informed, so as to cope. (7%)

7 Educational Planning

Other Comments : Large classes create problems which someone in educational planning can/should remedy. (20%)

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1 Hywel Coleman. *Learning and Teaching in Large Classes : A Bibliography.* 1989.
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6 Hywel Coleman. *Large Classes in Nigeria.* 1989.
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